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NON HODGKINS LYMPHOMA OF ORAL CAVITY

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ABSTRACT

Lymphoma is a malignant disease with two forms: Hodgkin's lymphoma (HL) and non-Hodgkin's lymphoma (NHL). Non-Hodgkin's lymphoma is diagnosed in extranodal sites in 40% of cases, and the head and neck region is the second most affected, with an incidence of 11–33%, while HL has a very low incidence in extranodal sites (1–4%). Among the intraoral findings, the most frequent are ulcerations, pain, swelling, and tooth mobility, while the extraoral findings included facial asymmetry and cervical, submandibular, and submental lymphadenopathy. The few studies reporting imaging findings, the lesions include hypodense lesions with diffuse boundaries, bone resorptions, and tooth displacements.

KEYWORDS: lymphoma, oral cavity, dental care, oral manifestations.

INTRODUCTION

Lymphomas are defined as heterogeneous malignancies of the lymphatic system characterized by a proliferation of lymphoid cells or their precursors. According to the WHO definition,1 lymphomas are classified as nonHodgkin's lymphoma (NHL) or Hodgkin's lymphoma (HL). Non-Hodgkin's lymphomas represent 86% of all lymphomas.

NHL is the second most common oropharyngeal malignancy after squamous cell carcinoma. Oral lymphomas account for 2.2% of all head and neck malignancies, 5% of salivary gland tumours, 3.5% of intraoral malignancies and 2.5% of all cases of lymphomas.2 There is an increasing incidence of NHL in patients with autoimmune disease, including coeliac disease, immune suppression from HIV, rheumatoid arthritis and Sjogren's syndrome.3 Diagnosis of NHL in the oral cavity may result from mucosal tissue or gingival swelling, or masses.4 When major salivary glands are involved, they are commonly the first area of clinical manifestation of disease, and disease is often confined to the salivary glands.

DISCUSSION

Lymphomas are common and heterogeneous malignancies characterized by proliferation of B-cells (most commonly), T-cells, or natural killer cells, which originate in lymph nodes or extranodal lymphatic tissues.5 Non-Hodgkin's lymphoma ranges from being relatively indolent to highly aggressive, and may be fatal. It may affect patients at any age. The incidence rate increases exponentially between 20 and 79 years, and is higher in men than women.

Primary extranodal site involvement is seen in 10% to 35% of cases at initial diagnosis and upwards of 50% during the course of the disease. These sites include the skin, kidneys, gastrointestinal tract, testes (in men), and bone.6 Malignant lymphoma of the oral cavity has been described previously although reports on the occurrence of intraoral extranodal T-cell lymphomas are scarce.7 Oral lesions may appear as a painless enlargement, erythematous, often with surface ulceration secondary to trauma. In general, the oral manifestation of NHL occurs secondary to a more widespread distribution throughout the body.

When oral soft tissue lesions first appear, they are relatively soft and often have an overlying ulceration, and are often characterized by an absence of other symptoms. If bone is the primary site, tooth mobility and alveolar bone loss are often noted. Pain, swelling, numbness of the lip and pathologically related fractures may be associated with the bone lesion.8

The cause of NHL is still unclear. Viruses have been suggested as a potential cause of the disease. An increased rate of lymphoma in patients who receive immunosuppressive therapy and patients who are congenitally immunosuppressed has been reported.9

Prognosis and outcome have been related to the expression levels of specific molecules, e.g., higher expression of CD38 in chronic lymphocytic leukaemia is associated with decreased risk.10

Serum concentration of lactate dehydrogenase (LDH) is an important predictor of survival in NHL as a high level of this enzyme indicates high tissue damage and lymphoma relapse or renewed growth.11 Staging of NHL is important for both guiding therapy and determining prognosis.

Dentists can play an important role in the early detection of the disease by understanding the signs of lymphomas. To establish an accurate diagnosis, microscopic evaluation and immunohistochemical staining are necessary. Extensive follow-up is needed to prevent a relapse.

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